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ARIZONA STATE UNIVERSITY ■ COLLEGE OF BUSINESS
CENTER FOR BUSINESS RESEARCH

Valley Homebuyers Pay More; Get Desired Features

Valley homebuyers are purchasing higher priced homes with more amenities and are obtaining most of the items they desire in a home. Price and high quality construction continue to be the most important considerations for the majority of buyers.

These findings resulted from an Arizona Real Estate Center survey of homebuyers who had purchased their home between May 1986 and June 1987. The 315 respondents answered questions about the type of home they had purchased as well as about features they desired in their home and additional items they had purchased for it.

A section of the survey directed to buyers who had moved to the Phoenix area within the past two years is discussed in the related article on page 3.

IMPORTANT HOUSING CHARACTERISTICS

Price ranked highest as an important or very important consideration when selecting the home (74 percent of respondents), followed closely by the desire for a better neighborhood (73 percent). Other important factors included the desire to own rather than rent (67 percent), investment value (64 percent), and the financing plan (60 percent).

Some housing characteristics varied in importance by the purchaser's housing type. For example, buyers of new single family homes considered the investment value of the home, status of the neighborhood, and available warranties to be more important than did buyers of other housing types. They were least concerned about the distance to work.

Both new single-family (SF) and new townhouse/condominium (TH/C) buyers considered the reputation of the builder and energy-saving features to be relatively important, but both types of resale buyers ranked these features of very little importance. Of the four groups, new TH/C buyers had the greatest desire to own rather than rent; they were more concerned about the monthly payment but least disturbed by the possibility of future price increases.

Both SF and TH/C resale buyers indicated a generally lower level of importance for all items. Table 1 shows the significance of certain home purchase factors, by housing type, in order of importance to the survey as a whole.

The most desired physical feature in all housing categories was high quality construction (98 percent), followed by a convenient floorplan (97 percent), and ample storage space (97 percent). Other important features included a light, open, spacious feeling (93 percent), a large master bedroom (93 percent), a modern kitchen (90 percent), and an enclosed garage (86 percent). Only the importance of the master bedroom and the garage varied by housing type - both were more highly valued by new home owners of both housing types than by resale owners.

With the exception of a large lot size and a swimming pool, the new single-family buyers obtained their

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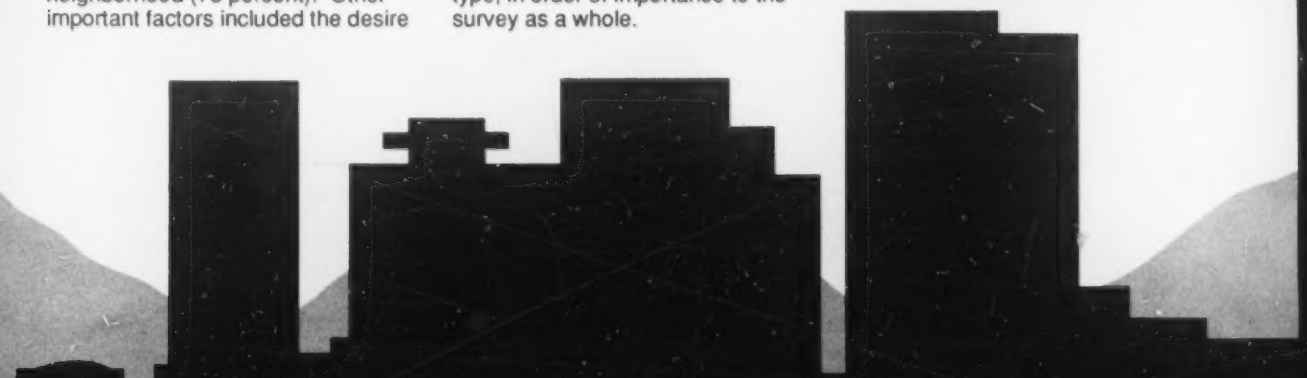

ARIZONA BUSINESS

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desired features more often than did the resale purchasers. This finding is reversed in the townhouse market; buyers of new homes were more likely to obtain a fireplace, an enclosed garage and a large lot size, but those purchasing previously owned homes obtained all other features more often.

Whether the home is new or previously owned, many new owners purchase additional items to express their personal lifestyle. Most often, all except TH/C buyers purchased new drapes. All groups commonly invested in landscaping, interior painting, and appliances.

THE SEARCH PROCESS

Housing affordability steadily improved during the two years between mid-1985 and mid-1987 in response to declining interest rates, relatively stable home prices, and modest improvements in household income. This enabled buyers to purchase larger, more expensive homes at the same level of affordability as less expensive homes of the past. As a result, both the median price and median square footage have climbed in the last two years.

The wide range of models and options offered by various builders make the new home market conducive to shopping. This "buyer-oriented market" diminishes the pressure to "buy now before the deal is gone." Accordingly, search times for purchasers of new homes – typically four-to-six months – were longer than they had been on past surveys. Resale home buyers, however, continued to search for one-to-three months.

Buyers of new townhouses were most likely to look for their home within the same general area, while those purchasing new single-family homes were least likely.

Almost all buyers became aware of their home through a real estate agent (42 percent), by driving by the home (32 percent), or through friends or relatives (11 percent). Nine percent credited a newspaper ad, while less than 3 percent credited magazine ads or billboards. Even though 80 percent of the resale SF buyers and 68 percent of the resale TH/C buyers purchased their home with the assistance of a real estate agent, only 53 percent and 42 percent, respectively, originally became aware of their home through the agent.

TABLE 1
IMPORTANT HOME PURCHASE FACTORS
By Housing Type

	New Single Family	Resale Single Family	New TH/* Condo	Resale TH/* Condo
Price	78	72	100	64
Area/Neighborhood	77	73	88	61
Desire To Own	70	65	88	69
Investment Value	74	64	50	50
Financing Plan	66	61	63	42
Number of Bedrooms	61	61	63	47
Monthly Payment	54	46	75	33
Energy-saving Features	63	39	75	42
Amenities	42	40	37	20
To Avoid Future Price Increase	36	36	25	34
Reputation of Builder	64	24	73	19
Distance to Work	20	34	38	39
Warranties	42	25	38	31
Higher Status	34	16	13	17
Proximity to Friends/Relatives	14	18	25	31

*TH = Townhouse

TABLE 2
CHARACTERISTICS OF HOMEBUYER AND HOME

	Median Age of Buyer	Median Household Income	Median Sales Price	Median Square Footage
Single Family - New	30-34	$40-49,999	$105,000	1,800
Single Family - Resale	30-34	30-39,999	86,000	1,700
Townhouse/Condominium - New	25-29	30-39,999	88,000	1,375
Townhouse/Condominium - Resale	40-44	30-39,999	71,000	1,500

Source (Tables 1 and 2): Survey conducted by the Arizona Real Estate Center, College of Business, Arizona State University

BUYER PROFILE

The typical respondent was married (74 percent) and had some college education; 46 percent had no children. The median age was 35-39 years, and the median household income was $40,000-$49,000. Table 1 shows buyer characteristics for all housing types.

The typical homeowner purchased a three-bedroom, two-bath, previously owned, single-family home, of frame construction. The median price of all homes purchased was $90,000, and the median size was 1,700 square feet (see Table 2). Mortgage companies were the most popular loan source in all categories (71 percent).

The majority of married households reported dual incomes (56 percent), even though the affordability of homes has been improving. The proportion of families with dual incomes was larger in younger respondents – 68 percent of those under age 40. Dual incomes are still quite important since almost half of the respondents believed they purchased the most expensive home they could afford, with a payment equaling 25 percent of their income.

Half of the respondents have lived in the Phoenix area for more than five years (36 percent for more than 10 years). Sixty-one percent plan to live in the area for 10 years or more (38 percent for the rest of their lives). More than half plan to live in their new home for 5-10 years.

The typical previous residence for all housing types, with the exception of new townhouses, was a previously owned, single-family home. New townhouse buyers had rented most often and had the shortest length of previous residence (2.5 years vs. six-to-nine years for other types).

Homeowners who had owned their previous home had sold it for a median price of $82,000 and had lived in it approximately seven years. They then purchased the surveyed home for a median price of $90,000.

Even though the desires and purchases of the respondents varied by housing type, they were typically satisfied with their new home. They purchased larger, more expensive homes with more amenities, which correlates to the recent trend both locally and nationally.

– **Sharla Kivett,** *Research Analyst*
Arizona Real Estate Center

Newcomers vs. Longer-Term Valley Residents

Homebuyer Survey Reveals Divergent Feature Preferences

Homebuyers who had lived in the Phoenix area less than two years desired different features in their homes than those who had lived here longer, according to the results of a survey conducted by the Arizona Real Estate Center in the College of Business, Arizona State University. The survey examined preferences in housing characteristics of buyers who had purchased their home between May 1986 and June 1987.

Recent migrants purchased larger, more expensive homes and were more satisfied with the features they obtained. They valued many of the same items as the longer-term residents, but they ranked some of their preferences differently.

DESIRED FEATURES

The new arrivals had greater desire for a guest bedroom, a pool, and recreational facilities; they were also more likely to purchase homes with these features. They had less desire for a fireplace or a fence.

When asked which physical features they value most, the new residents' preferences mirrored those of the group as a whole – high quality construction and a convenient floorplan. Other popular features included ample storage space, a large master bedroom, a modern kitchen, and a light, open, spacious feeling.

HOUSING CHARACTERISTICS

Recent Valley migrants purchased slightly larger, more expensive homes – almost half were at least 1,800 square feet and sold for more than $100,000. Only 38 percent of the group as a whole chose homes in this price and size range.

The newcomers also showed a small preference toward new, single-family homes and had slightly less interest in previously owned townhouses/condominiums. They were just as likely to purchase a home constructed of block or masonry as of frame, whereas the group as a whole bought more homes of frame construction.

The price of the recent migrants' prior home was higher than for longer-term residents, and they were more likely to purchase a home smaller than their previous one (see Table 1). Even though they were more likely to buy higher priced homes with more standard amenities, they rated the amenities at a lower level of importance than did the group as a whole.

THE SEARCH PROCESS

Recent arrivals to the Valley searched over a larger geographic area but spent less time looking for their home (typically less than one month, compared to one-to-three months for the whole group). They also utilized the services of a real estate agent more often.

A larger proportion of new residents owned, rather than rented, their previous home; they were also more likely to have owned a single-family home prior to purchasing their current residence.

THE NEW MIGRANTS

More than 30 percent of the new arrivals had moved from California or Illinois. Other states commonly listed as previous residences, in order of occurrence, include Texas, Colorado, Ohio and Michigan. Almost half had lived in their prior state for 20 years or more.

Respondents were asked to choose the factors important to their decision to move and then to identify the most important reason. Climate was the most frequent motivator (61 percent), followed by quality of life and employment. Almost 23 percent of the respondents said employment was the most influential reason for their relocation.

One-third of the new migrants expect to live in the Phoenix area for the rest of their lives, and 70 percent plan to make this area their home for 10 years or longer. They expect to live in their current home for either five or 10 years.

Typically, the new migrants were somewhat older, had a slightly higher income, and were more likely to be married. Their median age was 40-44 years, and they reported an income just greater than the overall median of $40,000-$49,000. Even though a larger proportion of the newcomers were married (83 percent vs. 74 percent), fewer of the couples reported both spouses as wage earners (50 percent vs. 63 percent).

Employment played a significant part in the decision to relocate for many of the migrants. Seventy-five percent had accepted a position with a Valley employer prior to moving, and almost all had found work within three months. A smaller proportion of this group moved due to lack of job opportunities in their previous areas of residence, even though they came from the same states as the primary group. As with the survey respondents as a whole, the predominant occupations were those of engineer, business executive, and salesperson.

Respondents relocating to the Phoenix area less than two years ago were more likely to obtain the features they desired, particularly if they purchased a single-family home. The larger size of the typical home as well as the amenities that tend to be found in higher priced homes could partially explain their greater satisfaction.

– **Sharla Kivett,** *Research Analyst Arizona Real Estate Center*

TABLE 1
COMPARISON OF CHARACTERISTICS
(Median Values)

	Recent Arrivals	Entire Survey
Home Price	$95,000	$90,000
Square Footage	1,800	1,700
Age of Buyer	40-44 yrs.	35-39 yrs.
Income	$40,000-49,000	$40,000-49,000
Previous Home Price	$90,000	$82,000

Source: Survey conducted by the Arizona Real Estate Center, College of Business, Arizona State University

Valley Inflation Still Modest in Fourth Quarter

Valley inflation remained moderate during fourth quarter 1987, registering a seasonally adjusted increase of 0.9 percent. Before seasonal adjustment, the Metropolitan Phoenix Consumer Price Index rose 0.5 percent, to 202.7 (1977 = 100). The index was 4.7 percent higher than in fourth quarter 1986, the largest annual gain since mid-1985. However, the annual advance should slow to 4 percent or less during the first half of 1988, before returning to the 4.5-to-5 percent range.

COMPONENT INDEXES

A major increase in housing costs was offset by a decline in transportation costs, keeping the overall inflation rate comparable to that of the prior two quarters (see Table 1). Excluding gasoline prices, which fell sharply, the fourth quarter index increased approximately 1.5 percent, the largest jump since first quarter 1985. However, this gain followed a relatively small increase in third quarter 1987.

Food and Beverages

Slight inflation again characterized this category; the change in the index for the year ending fourth quarter 1987 was just 1.6 percent. Food-at-home prices declined slightly, but moderate inflation was measured in the food-away-from-home and alcoholic beverages categories.

Among grocery items, cereal and bakery products again posted a moderate advance in price (see Table 2). Prices of dairy products climbed, after two straight quarterly decreases. In contrast, fruits and vegetables became less expensive as fresh produce prices fell, and the other-food-at-home category registered its fourth consecutive quarterly decrease.

Housing

Housing costs soared, recording the largest seasonally adjusted change in more than four years. This jump resulted when several important categories simultaneously experienced unusually large gains and should not be viewed as a trend toward higher inflation in housing. Despite the big quarterly increase, the total change in the four quarters of 1987 was only 3.6 percent.

Renters' costs rose more during the fourth quarter than in any quarter since 1984, but the increase followed four consecutive quarterly declines; the cumulative change during 1987 was negative. More rental reductions are possible next year, since the apartment vacancy rate remains high. Homeowners' costs rose by the second largest amount in more than four years, after two quarters of slight advances.

The greatest factor affecting housing costs was a jump in utility gas rates of more than 10 percent, the third consecutive gain following a series of declines through most of 1985 and 1986. Rates were 20 percent higher than in fourth quarter 1986. In contrast, electricity rates were only 1 percent higher than at year-end 1986, despite a seasonally adjusted gain in the fourth quarter.

Transportation

Transportation costs decreased, following large advances during the first two quarters of 1987. The drop was entirely due to a 10 percent plunge in gasoline prices. Despite these declines, gasoline prices were up 19 percent, and the transportation index was 10 percent higher than one year earlier.

Though auto maintenance and repair costs fell, prices of parts rose sharply. Likewise, a slight dip in auto insurance premiums was offset by a minimal gain in vehicle finance charges. New and used car prices continued to rise at relatively high rates.

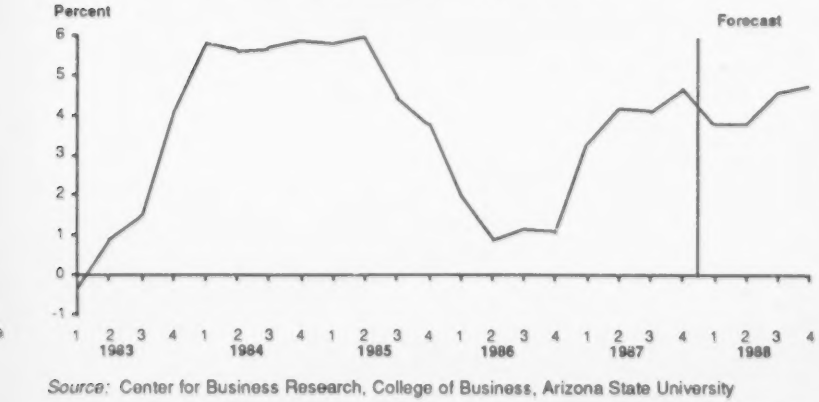
Medical Care

Health care inflation remained moderate; the increase from fourth quarter 1986 to fourth quarter 1987 was only 3.3 percent. In the fourth quarter, costs of non-prescription drugs and professional services dropped, the latter for the first time since 1984, offsetting moderate-to-large gains in costs of prescription drugs and hospital services. The slowdown in medical care inflation resulted primarily from declines in the health insurance category. Despite an advance in the fourth quarter, insurance premiums were lower than in fourth quarter 1986.

Other Categories

Apparel and upkeep costs rose modestly in the fourth quarter, as did those of other goods and services. The entertainment category, however, again climbed substantially as the winter increase in fees for some

FIGURE I
METROPOLITAN PHOENIX CPI
Percent Change from Same Quarter, Prior Year



Source: Center for Business Research, College of Business, Arizona State University

Metro Phoenix CPI

The Metropolitan Phoenix Consumer Price Index (CPI), on which these inflation figures are based, is prepared by the Center for Business Research in the ASU College of Business. The Center conducts comprehensive pricing surveys each quarter, in cosponsorship with Valley National Bank. For more information on the CPI, call the Center at (602) 965-3961.

participant sports, such as golf, was larger than normal.

COMPARISON AREAS

Not seasonally adjusted, inflation in the Phoenix area during the fourth quarter was slightly less than the U.S. rate. Metropolitan Phoenix had lower or comparable rates in all major categories except housing and entertainment (see Table 3).

Compared to fourth quarter 1986, the Phoenix area's inflation rate was comparable to the national rate. Lower inflation in the categories of food and beverages, apparel and upkeep, and medical care was offset by higher inflation in the transportation and entertainment categories.

OUTLOOK

Inflation in the Phoenix area should continue to track that of the nation, each remaining in the 4-to-5 percent range during 1988. Earlier fears of much higher inflation, prevalent in financial markets, seem unjustified. The worldwide decline in oil prices late in 1987 augers more moderate consumer inflation during 1988.

In the Phoenix area, comparatively slow economic and population growth is expected to continue in 1988, holding the local inflation rate near that of the nation. While inflation in some categories, such as medical care and electricity, is likely to accelerate in 1988, other inflation rates are unlikely to change much, including those of large categories such as renters' costs, homeowners' costs and automobiles. Gasoline prices probably will remain steady or decline in early 1988.

The surge in inflation registered early in 1987, which was due to rising gasoline prices, is not likely to be repeated in 1988. Thus, the annual inflation rate temporarily will slow, even though the quarterly changes are likely to remain similar to, or slightly higher than, those of the last three quarters of 1987 (see Figure I).

The result is that the year-end to year-end rate in 1988 is not likely to be much different from the 1987 rate of 4.7 percent. The 1988 annual average also is unlikely to be much different from the 4.1 percent registered in 1987.

– **Tom R. Rex**
Research Manager

TABLE 1
PERCENT CHANGES IN
METROPOLITAN PHOENIX CONSUMER PRICE INDEX

		Seasonally Adjusted from Preceding Quarter							
Expenditure Category	*Relative Importance*	*1st 1986*	*2nd 1986*	*3rd 1986*	*4th 1986*	*1st 1987*	*2nd 1987*	*3rd 1987*	*4th 1987*
ALL ITEMS	100.0	-0.2	0.4	0.8	0.5	2.1	1.1	0.7	0.9
Food and Beverages	18.7	0.5	1.0	2.3	0.1	-0.2	0.5	0.9	0.6
Housing	39.5	0.7	0.2	1.0	0.4	0.5	0.2	0.5	2.3
Apparel and Upkeep	4.8	-3.3	5.8	-2.5	1.9	-2.5	2.8	2.7	0.9
Transportation	21.2	-2.5	-1.9	-1.1	-0.2	8.1	3.0	0.9	-2.0
Medical Care	6.9	1.3	1.7	0.2	1.2	1.8	2.7	-2.1	0.9
Entertainment	4.8	-1.7	2.4	-0.8	4.5	2.4	-1.2	2.0	3.1
Other Goods and Services	4.3	1.7	0.7	2.1	0.6	2.0	0.3	2.9	0.6

TABLE 2
METROPOLITAN PHOENIX CONSUMER PRICE INDEX
Fourth Quarter 1987

	Index (1977 = 100)		Percent Change from	
Expenditure Category	*Last Quarter*	*This Quarter*	*Last Quarter**	*Year-Ago Quarter*
ALL ITEMS	201.7	202.7	0.9	4.7
Food and Beverages	183.0	183.0	0.6	1.6
Food	183.2	183.1	0.5	1.4
Food at Home	183.0	181.4	-0.2	1.8
Cereal and Bakery Products	205.9	208.3	1.7	5.4
Meats, Poultry, Fish, and Eggs	168.0	169.5	0.9	1.5
Dairy Products	166.8	171.6	2.8	3.6
Fruits and Vegetables	202.0	192.2	-3.7	4.4
Other Food at Home	172.0	166.7	-1.5	-2.3
Food Away from Home	180.8	183.3	1.7	0.7
Housing	208.0	210.3	2.3	3.3
Shelter	224.1	228.1	1.9	2.7
Renters' Costs**	116.6	119.1	2.1	-0.2
Homeowners' Costs**	114.5	116.3	1.6	3.8
Fuel and Other Utilities	180.7	180.0	5.3	6.8
Gas (piped) and Electricity	201.1	198.5	8.1	9.6
Household Furnishings/Operations	155.6	155.6	1.1	2.2
Apparel and Upkeep	151.4	154.1	0.9	2.8
Transportation	195.9	192.5	-2.0	10.0
Private Transportation	193.4	189.5	-2.2	10.3
New and Used Cars	204.6	208.7	3.0	7.1
Motor Fuels	166.6	152.9	-9.8	18.7
Public Transportation	235.7	239.6	1.1	4.9
Medical Care	278.1	281.3	0.9	3.3
Entertainment	206.8	220.1	3.1	6.8
Other Goods and Services	193.3	193.0	0.6	5.9

*Seasonally adjusted
**Base period is second quarter 1983.

TABLE 3
METROPOLITAN PHOENIX AND UNITED STATES
CONSUMER PRICE INDEXES
Fourth Quarter 1987

	Percent Change from Last Quarter*		Percent Change from One Year Ago	
Expenditure Category	*Phoenix*	*United States*	*Phoenix*	*United States*
ALL ITEMS	0.5	0.9	4.7	4.5
Food and Beverages	0.0	0.4	1.6	3.3
Housing	1.1	0.0	3.3	3.6
Apparel and Upkeep	1.8	5.4	2.8	6.2
Transportation	-1.8	1.2	10.0	6.5
Medical Care	1.1	1.2	3.3	6.1
Entertainment	6.4	1.5	6.8	3.9
Other Goods and Services	-0.2	2.6	5.9	6.0

*Not seasonally adjusted

Source (Tables 1, 2 and 3): Metropolitan Phoenix data compiled by the Center for Business Research, College of Business, Arizona State University, in cosponsorship with Valley National Bank; other data in Table 3 are from the U.S. Department of Labor, Bureau of Labor Statistics.

December Purchasing Indicators Struggle Upward

The Arizona economy posted advances in all areas in December. New orders, production, and employment continued to increase, although the rate of climb slowed somewhat. Employment grew again, for the 12th month in a row. Prices rose at the same rate as in November.

Some slowing in the growth rate of Arizona's five-year-old expansion now is evident, although the economy still shows considerable strength. Further moderation should be anticipated over the next six months, as adjustments are made in response to continuing financial problems and a deficit trade balance that seems to resist improvement. The chances of a slight recession about mid-year 1988 have increased, although any pause is likely to be short.

PRICES

Prices paid for purchased items continued to escalate in December at a rate consistent with those of the preceding five months. While the rate of inflation definitely stepped up during the last half of 1987, it does not appear to be out of control.

DELIVERY TIME

Delivery time on vendor shipments lengthened at a rate somewhat smaller than in each of the preceding three months. This stretchout in lead times indicates that order backlogs at supplier firms remain healthy.

INVENTORY LEVELS

Inventory levels of purchased materials experienced only a slim increase, the smallest since last July. Additions to inventory during second half 1987 all have been small. It is unlikely that any inventory overhang exists that might result in forced reductions, triggering a downswing.

NEW ORDERS

New orders went up in December but at half the November rate. This monthly increase was the smallest since December 1986. Growth in new orders has shrunk consistently over the past four months as some of the steam has gone out of the expansion.

PRODUCTION

Production accelerated at the smallest rate since June 1986. This indicator's increase rate has become smaller each month since last August.

EMPLOYMENT

Employment grew in December at the same rate as in November. The trend in employment has been consistently up in each month of 1987, which is a strong signal that business is still on the rise.

PURCHASES

Purchases of materials and supplies rose again, although the rate was smaller than in November. Purchases were less robust in the second half of the year, caused by the moderation in production increases.

CAPITAL EXPENDITURE PLANS

The special question, asked each December, relates to *anticipated expenditures* for new plant and equipment during the coming year. The responses indicate that some expansion is planned for 1988, although the anticipated rate is the smallest since December 1982 – the low point of the last recession. Evidently, Arizona firms feel that the economy will continue to grow and that additional capacity will be needed. However, their upward projection for 1988 is the most cautious since the current expansion began early in 1983.

– Harold Fearon

Dr. Fearon is the National Association of Purchasing Management Professor in the ASU College of Business.

TABLE 1
DECEMBER PURCHASING SURVEY

	Percent of Purchasing Managers Indicating Each Response (December compared to November)		
Key Indicators	*Higher*	*Same*	*Lower*
Prices paid for major commodities	42	55	3
Delivery time from vendors	39	51	10
Purchased materials inventory level	30	42	28
New orders received	39	33	28
Production	32	41	27
Employment	22	66	12
Purchases	46	26	28

TABLE 2
ANTICIPATED EXPENDITURES FOR NEW PLANT AND EQUIPMENT

	Percent of Purchasing Managers Indicating Each Response		
	Higher	*Same*	*Lower*
1988 compared to 1987	42	28	30
1987 compared to 1986	53	34	13
1986 compared to 1985	48	33	19
1985 compared to 1984	53	28	19
1984 compared to 1983	53	31	16
1983 compared to 1982	27	26	47
1982 compared to 1981	40	19	41
1981 compared to 1980	49	27	24

Source (Tables 1 and 2): Purchasing Management Association of Arizona and the Purchasing Management Association of Southern Arizona

Arizona Purchasing Survey

Now in its 26th year of monthly reporting, Dr. Harold Fearon's survey of Arizona business conditions utilizes data gathered at the close of each month from members of the purchasing management associations of Arizona and southern Arizona. They indicate the direction - higher, unchanged, or lower - of seven key measures of economic activity in the month just ended. These purchasing managers deal daily with supply, demand, and price factors in the marketplace; their aggregate readings have accurately charted the state's economic course for two decades, providing timely data on turning points.

Arizona Leading Index Dips in November

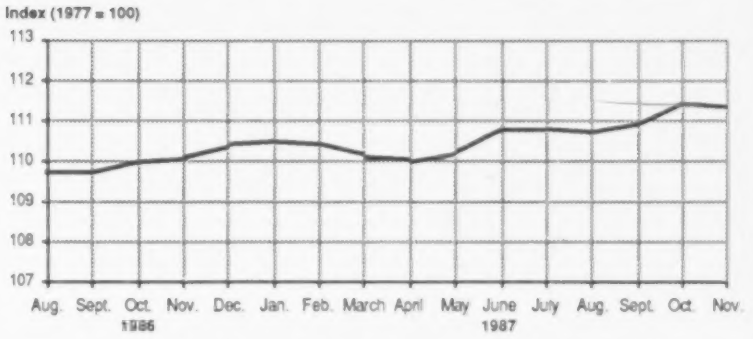
The Arizona Index of Leading Economic Indicators decreased slightly in November to 111.3, 0.1 percent below October's record high 111.4 (see Figure I).

The index is based on 10 indicators weighted and combined to project the pace of the Arizona economy up to six months in the future. Seven of the 10 components declined in November.

The greatest negative influence came from a seasonally adjusted increase in new unemployment insurance claims. Several other components – hours worked in Arizona manufacturing establishments, a national measure of sensitive materials prices, and the money supply (M2) – also pulled the index down.

The value of residential building permits rose for the third consecutive month, after dipping in August to a low point for the year. Inventories and orders, two of the five components derived from a survey of Arizona purchasing managers, also advanced in November. However, the managers reported that seasonally adjusted delivery times, production, and employment all declined.

FIGURE I
ARIZONA INDEX OF LEADING ECONOMIC INDICATORS



Source: Economic Outlook Center, College of Business, Arizona State University

OUTLOOK

Analysts are still attempting to unravel the impacts of October's stock market collapse. Initial fears of widespread recession have not been realized. Indicators of production and employment have remained stable.

In spite of calls for a precautionary injection of liquidity into the economy, Federal Reserve authorities allowed the money supply (both M1 and M2) to decline in November. This policy tack can only be interpreted as evidence that the monetary authorities have raised their inflation guard again, satisfied the economy will not tumble into recession as a result of the stock market slide. The Fed's posture is a signal that interest rates will not come down in the near future. For Arizona, this means that residential construction will not receive any significant stimulation during early 1988.

TABLE 1
NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS

	Net Contribution+			
	Aug.	*Sept.*	*Oct.*	*Nov.*
Delivery Time*	.07	.05	-.01	-.02
Inventory Levels*	.04	.03	-.06	.07
New Orders*	.09	-.02	-.01	.07
Production*	.13	-.05	.02	-.07
Employment*	-.02	-.04	.07	-.01
Residential Building Permits	-.68	.41	.13	.41
Unemployment Insurance Claims	.16	-.10	.17	-.20
Average Workweek, Manufacturing	.12	-.25	.09	-.12
Money Supply	.02	.14	.09	-.15
Change in Sensitive Materials Prices	-.03	-.05	.01	-.06
OVERALL INDEX CHANGE (%)	-.1	.1	.5	-.1

+The net contribution of each component is calculated by multiplying the monthly percent change in its index by its relative importance.

*Based on indicators from the purchasing management associations of Arizona and southern Arizona.

Source: Economic Outlook Center, College of Business, Arizona State University

The dollar's skid in international markets should eventually favor Arizona agricultural and manufacturing exports. While the dollar was falling during 1987, however, the average workweek in Arizona manufacturing was shorter than in 1986.

The path of the Arizona leading index during 1987 flattened in the spring and again in late summer, consistent with the moderate pace of growth. Sharp or extended declines in the index, indicators of recession ahead, are absent. The forecast is that the Arizona economy will experience slow growth in 1988, not much different from its 1987 performance and not substantially better or worse than the outlook for the nation as a whole.

– **Lee R. McPheters,** *Director*
Economic Outlook Center

ARIZONA ECONOMIC INDICATORS

	Month or Quarter	Value	Percent Change from Previous Period	Percent Change from Year Ago	Year-to-Date Value	Year-to-Date Percent Change from Year Ago
GROSS STATE PRODUCT (In Billions of Dollars, at Annual Rate)						
Arizona - Current Dollars	2nd Qtr.	56.162	1.3	8.1	NA	NA
Arizona - 1982 Dollars	2nd Qtr.	47.609	-0.2	4.0	NA	NA
CONSUMER PRICE INDEX (1977 = 100)						
Metropolitan Phoenix	4th Qtr.	202.7	0.5	4.7	NA	NA
INDEX OF LEADING ECONOMIC INDICATORS (1977 = 100)						
Arizona	Nov.	111.3	-0.1	1.1	NA	NA
BUILDING PERMITS (Total Dollar Value in Thousands)						
Maricopa County	Nov.	218,663	-38	-8	3,645,295	-1
Pima County	Nov.	42,912	7	-14	550,722	-28
Balance of State	Nov.	37,030	-43	-23	614,980	-2
Arizona	Nov.	298,605	-35	-11	4,810,997	-5
TOTAL HOUSING UNITS AUTHORIZED						
Maricopa County	Nov.	1,565	-36	-16	26,664	-36
Pima County	Nov.	197	-45	-71	5,890	-48
Balance of State	Nov.	921	-10	1	10,110	-14
Arizona	Nov.	2,683	-30	-22	42,664	-34
HOME SALES						
Maricopa County - Number	Dec.	3,240	-29	-50	59,250	-6
Maricopa County - Median Price	Dec.	83,275	1.4	4.4	80,050	2.6
HOUSING AFFORDABILITY INDEXES						
Metropolitan Phoenix - New Homes	3rd Qtr.	92	-5.2	-4.2	NA	NA
Metropolitan Phoenix - Resale Homes	3rd Qtr.	109	-1.8	1.9	NA	NA
MORTGAGE INTEREST RATES (Conventional, 30-year, Fixed-rate)						
Maricopa County	Dec.	10.6	-0.9	15.2	NA	NA
POPULATION ESTIMATES (In Thousands)						
Maricopa County	3rd Qtr.	1,984	0.7	3.2	NA	NA
Arizona	3rd Qtr.	3,460	0.6	2.9	NA	NA
ELECTRICAL POWER SALES (In Millions of Kilowatt Hours)						
Arizona	Nov.	2,754	-8.3	13.5	35,529	7.5

NA = Not Applicable

Source: Center for Business Research, College of Business, Arizona State University

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